What is claimed is:

1. A fluid flow sensing apparatus, comprising:

a flow-responsive element projecting into a fluid flow path; and

a position sensor in communication with the element to detect a change in position of the element in response to a fluid flow.

2. The fluid flow sensing apparatus of claim 1, wherein the apparatus has a sensitivity that is generally inversely related to a pressure generated by the fluid flow.

3. The apparatus of claim 1 wherein:

the flow-responsive element can change position in more than one direction.

4. The apparatus of claim 1 wherein:

the deformable element deforms when the fluid flow is at a rate of between about -10 l/min. to about 150 l/min.

5. The apparatus of claim 1 wherein:

the sensor is in communication with a fluid flow controller.

6. A device for delivering gas to a patient, comprising:

a gas flow generator to generate a positive gas pressure along a gas flow path;

a multidirectional gas flow sensing apparatus to detect a patient breathing;

a gas flow controller to control the gas pressure in response to the patient breathing; and

a patient breath interface to monitor the patient's breathing;

wherein the gas flow sensing apparatus comprises a flow-responsive element projecting into the gas flow path and a position sensor in communication with the element to detect a change in position of the element in response to the patient breathing, said position sensor further being in communication with the gas flow controller.

7. The device of claim 6 wherein:

the flow-responsive sensor has a sensitivity that is inversely related to a fluid dynamic pressure within the device.

8. The device of claim 6 wherein:

the element changes position to one degree when the patient is inhaling and to another degree when the patient is exhaling.

9. The device of claim 6 wherein:

the gas flow generator generates a gas pressure for inhaling and a different gas pressure for exhaling in response to the change in position of the element.

10. The device of claim 6 wherein:

the change in position of the flow-responsive element is proportional to a force generated by the patient breathing.

11. The device of claim 6 wherein:

the flow-responsive element is made from a material selected from the group consisting of plastic, metal, ceramic, paper, composite, or a combination thereof.

12. The device of claim 6 wherein:

the flow-responsive element is made of Mylar®.

13. The device of claim 6 wherein:

the position sensor comprises a magnet and a Hall Effect sensor.

14. The device of claim 13 wherein:

the magnet is attached to the flow-responsive element.

15. The device of claim 13 wherein:

the Hall Effect sensor is positioned proximate to the magnet and spaced apart from the flow-responsive element.

16. The device of claim 13, comprising a plurality of magnets.

17. The device of claim 13, comprising two magnets.

18. The device of claim 17 wherein:

each magnet is positioned on an opposite surface of the flow-responsive element, and the magnets are attached to the element by an attractive magnetic force between the magnets.

19. A fluid flow sensing apparatus comprising:

a flow-responsive element projecting into a fluid flow path; said element being supported at a zero-flow position and moveable away from the zero-flow position in response to a fluid flow;

said element further being biased into the zero-flow position in the absence of a fluid flow; and

a position sensor for detecting a change in position of the flow-responsive element relative to the zero-flow position.

20. The flow sensing apparatus of claim 19, wherein the apparatus has a sensitivity that is generally inversely related to a pressure generated by the fluid flow.